UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,038	04/05/2000	Kevin E. Spaulding	80916RLO	6817

21171 7590 11/16/2004

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
NGUYEN, MADELEINE ANH VINH	
ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/543,038	SPAULDING ET AL.	
	Examiner	Art Unit	
	Madeleine AV Nguyen	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11* is/are allowed.

6)☒ Claim(s) *1-10 and 12-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This communication is responsive to amendment filed on June 25, 2004.

Applicant amends the specification, drawings, claims 1, 6, 11, 13, 14, 18 and 24.

Response to Applicant's Remarks

A. The objection of the specification and the drawings are canceled due to the amendments of the specification and the drawings.

B. Applicant remarks that the present invention is directed at characteristics of an image gamut and Popa is directed at characteristics of image resolution.

It is noted that, although Popa mentions "high resolution version" and "low resolution version", there is a big distinction between the resolution and the gamut (color) of the image. For instance, from Fig.1 (a drawing of a client to server message structure) and Fig.2 (a drawing of a server to client message structure), a selection of color is clearly defined. Fig.3 shows a client application 20 which enables an end user to select (manually or automatically) the image file, size, resolution and colour, and creates the request message (col. 5, lines 59-61). In addition, throughout the specification, Popa clearly illustrates the difference between the resolution and color gamut such as "The list of strips specifies: ... (c) **a number associated with the colour required (for example: 1-red; 2-green; 3-blue)**." (col. 4, lines 63-67), "the file format contains the information that is necessary to access multiple resolutions, sizes and **colour spaces**" (col. 5, lines 47-48), "A server application 16 can accept a "request message" for a

specific file, resolution, size and **colour space**" (col. 5, lines 49-50), "a dialogue box for enabling the user to select: a particular image; the size of the image; the resolution; and **the number of colors**." (col. 5, line 67 – col. 6, line 2), "the user may then choose to view it on a larger size and with higher resolution, **more colors** etc." (col. 6, lines 25-26), "the client initiates a request by indicating the image, size, resolution and **colour**" (col. 6, line 67 – col. 7, line 2), "the image and device parameters can be integrated in any User Interface (UI) design which provides for a selected combination of valid resolution, dimension and **colour space options**" (col. 7, lines 59-64), "Establish the range of valid dimension, resolution and **colour space parameters**" (col. 8, lines 29-31), "This group of functions is implemented to establish valid image display and output parameters and to create a user interface which facilitates the selection of a valid combination of dimension, resolution and **colour quality options**." (col. 10, lines 52-55), "other auxiliary functions are called by the application to retrieve **colour plane information**" (col. 11, lines 65-66). Thus, in addition to the characteristics of image resolution, Popa teaches the characteristics of an image color gamut through the selection of the number of colors, the additional number of colors, the inputting of the color space parameters, the color quality options etc.

In the last paragraph of the Remarks in page 8, the applicant defines "An image color gamut is a definition of the range of colors that an image includes. For example, the color gamut of an image may only be two colors, black and white and shades of gray caused by blending these two colors. On the other hand the image color gamut may be more extensive and could include all of the colors that can be produced on a certain output device, such as a computer CRT. This would represent a limited but more extensive gamut than the black and white gamut mentioned previously." Thus, the teaching of Popa regarding the selection of the number of

colors, additional number of colors, the color space parameters, the color quality options etc. as discussed above can read on the defined image color gamut since the range of colors of the image can be selected, added and modified.

C. Applicant remarks that Popa never forms a "limited color gamut digital image" but rather forms a limited resolution digital image with the same color gamut as the high resolution input image.

As stated above, Popa also teaches the formation of a limited color gamut digital image with different color gamuts by selecting the number of colors, adding more colors, inputting color space parameters, and color quality options.

Therefore, applicant's arguments filed on June 25, 2004 have been fully considered but they are not persuasive. The rejection of claims 1-10, 12-28 is maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 12-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Popa (US Patent No. 6,006,231) in view of Fredlund et al (US Patent No. 5,666,215).

Concerning claim 1, Popa discloses a method for providing a user access to a color digital image (Fig.3) comprising the steps of representing the color digital image with a limited color digital image (e.g., a low resolution digital image), and one or more associated residual image(s) representing a difference between the color digital image and the limited color digital image (e.g., the difference between the color digital image or a high resolution image with more colors, different color space and the low resolution digital image); storing the limited digital image and the associated residual image(s) in an electronic memory (14); providing the user's or user's designee access to the limited color digital image to provide a preview image (col. 6, lines 21-31); providing the user or user's designee access to the associated residual image(s) in the electronic memory (col. 6, lines 14-31).

Popa does not directly teach that the color digital image is an extended color gamut digital image. However, as described in the specification, "The extended color gamut digital image 20 can take many different forms. For example, the image can be a scanned photographic print, a scanned photographic negative, a scanned photographic transparency, or an image from a digital camera, etc." (page 6, lines 3-7). Popa also teaches that the image can be a scanned photographic print, a scanned photographic negative, a scanned photographic transparency, or an image from a digital camera, etc (col. 6, lines 45-53). It would have been obvious to one skilled in the art at the time the invention was made to consider the color digital image in Popa is the extended color gamut digital image since the image taught in Popa has similar limitations as the ones in the claimed invention.

Popa fails to teach the step of obtaining a payment identifier from the user and making payment using such payment identifier to permit the user or user's designee access to the digital

image. However, it was commonly known in the art that the user has to pay a fee before receiving a request for loading some information from the network. Fredlund et al supports that well known in the art by teaching a system for remotely selecting photographic images wherein the user has to pay for his ordering related image services (Abstract). From Figs. 4-5, the user has to provide his name, address, payment method, the credit card information when submitting an order. It would have been obvious to one skilled in the art at the time the invention was made to combine the teaching of Fredlund to the method in Popa so that the user has to pay before getting the associated residual image(s) since Popa also teaches that his invention can gain significant savings in services and costs for users, vendors or service providers such as scanner manufacturers, printer manufactures, radiology and medical image, image selection for digital photography (col. 2, lines 40-42; col. 3, lines 42-49; col. 6, lines 50-53).

Concerning claims 2-3, 7-10, 12-23, Popa further teaches the electronic memory is a network server (claim 2), a computer readable storage medium (claim 3), (Fig.3), the limited color digital image is in a particular device dependent color space such as RGB color space (claims 7, 8), (for displaying) and displaying the limited color digital image on a display using a communications network (claims 9, 10), (Fig.3; col. 4, lines 65-67; col. 6, lines 22-31); the limited color digital image is stored in a different digital image file with the residual image(s), (claims 12), (col. 5, lines 42-48); the residual image(s) together with the limited color digital image to form a reconstructed extended color digital image (claim 13), (col. 6, lines 14-21); the step of applying a desirable image modification to the reconstructed extended color digital image wherein the modification is interactively user specified by applying an automatic algorithm to the digital image or modified color reproduction aims to the image (claims 15-17), (col. 5, line

49 – col. 6, line 6); the step of using the residual image(s) together with the limited color digital image to form a digital image appropriate for displaying on an output device (claim 18), (col. 8, lines 30-33; col. 11, lines 63-65); the extended color digital image originates from a scan of a photographic negative or a scan of photographic transparency or a scan of a photographic print or from a digital camera (claims 19-22), (col. 6, lines 45-53); the residual image(s) are determined by computing a difference between the extended color digital image and the limited color digital image (claim 23), (col. 6, lines 12-58; col. 9, line 41 – col. 15, line 27).

Concerning claims 4-6, Fredlund further teaches that the payment identifier includes information about an account from which payment is to be electronically transferred, a credit card account, the step of providing a reader for reading a credit card from the user (Fig.5).

Concerning claim 24, Popa in view of Fredlund discloses the method as claimed in claim 1 above. Popa further teaches the step of specifying a desirable modification to the image (col. 5, line 59 – col. 6, line 6).

Concerning claims 25-27, Popa further teaches that the modification is interactively user specified by applying an automatic algorithm to the digital image or modified color reproduction aims to the image (col. 5, line 49 – col. 6, line 6).

Concerning claim 28, Popa in view of Fredlund discloses a computer storage product having at least one computer storage medium having instructions stored therein causing one or more computers to perform the method as claimed in claim 1 above (Fig.3).

Allowable Subject Matter

2. Claim 11 is allowed.

The following is an Examiner's Statement of Reasons for Allowance: Claim 11 is allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches a method claimed in claim 1 wherein the residual image representing a difference between the extended color gamut digital image and the limited color gamut digital image are stored as meta-data in a digital image file.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Madeleine AV Nguyen
Primary Examiner
Art Unit 2626

November 02, 2004